

What is claimed is:

1. A device for connecting and sealing between a transmission line connector and a matingly configured signal source connector, the device comprising:

5 a hollow body forming an outer conductor and defining a longitudinal axis therethrough;

an inner conductor ^{104'} extending through said outer conductor ^{102'} along said longitudinal axis, one end of said outer conductor and a corresponding ^{118'} end of said inner conductor ^{114'} adjacent thereto defining a signal input of said device, and opposite ends of said outer connector and said inner conductor defining a signal output of said device;

an electrical insulator ^{150'} disposed between and watertight sealed to said inner and outer conductors ¹⁰²;

wherein said signal input of said device is configured for connection to said signal source connector and said signal output of said device is configured for connection to said transmission line connector.

2. The device of claim 1 wherein said signal source is an antenna. ^{NPR 112}

3. The device of claim 1 wherein said signal source is another transmission ¹¹² line.

4. The device of claim 1 further including:

a first sealing ^{152'} member positioned between said electrical insulator and said outer conductor creating said watertight seal therebetween; and

25 a second sealing ^{158'} member positioned between said electrical insulator and said inner conductor creating said watertight seal therebetween.

5. The device of claim 4 wherein an outer surface of said insulator defines a first channel therein extending completely around an outer periphery of said insulator in

a direction perpendicular to said longitudinal axis, said first sealing member disposed within said first channel.

6. The device of claim 5 wherein said inner surface of said insulator defines a second channel therein extending completely around an inner periphery of said insulator in a direction perpendicular to said longitudinal axis, said second sealing member disposed within said second channel.

7. The device of claim 6 wherein said first and second sealing members are flexible sealing rings.

8. The device of claim 1 further including a liquid sensor disposed between said inner and outer conductors, said liquid sensor producing a signal indicative of liquid within said device.

9. The device of claim 8 wherein said inner and outer conductors define a cavity therebetween, said liquid sensor in fluid communication with said cavity.

10. The device of claim 9 further including a signal monitor electrically connected to said liquid sensor, said signal monitor configured activate an alarm if said signal exceeds a signal threshold.

11. The device of claim 1 wherein said electrical insulator is positioned adjacent to said signal input of said device, said device further including:
another electrical insulator disposed between said inner conductor and said outer conductor and positioned adjacent to said signal output of said device, said another electrical insulator watertight sealed to each of said inner and outer conductors.

12. The device of claim 11 further including:

a first sealing member positioned between said another electrical insulator and said outer conductor creating said watertight seal therebetween; and

a second sealing member positioned between said another electrical insulator and said inner conductor creating said watertight seal therebetween.

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13. The device of claim 11 wherein said inner and outer conductors define a cavity therebetween, and further including a liquid sensor in fluid communication with said cavity.

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14. The device of claim 13 wherein said cavity extends between said electrical insulator and said another electrical insulator.

15. The device of claim 13 wherein said cavity extends between said signal input of said device and said electrical insulator.

16. The device of claim 13 wherein said cavity extends between said another electrical insulator and said signal output of said device.

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17. A device for connecting between a transmission line and a signal source, the device comprising:

an elongated hollow body forming an outer conductor;

an elongated inner conductor received within said outer conductor, one end of said outer conductor and a corresponding end of said inner conductor adjacent thereto defining a signal input of said device configured for connection to said signal source, and opposite ends of said outer conductor and said inner conductor defining a signal output of said device configured for connection to said transmission line; and

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a liquid sensor disposed between said inner and outer conductors, said liquid sensor producing a signal indicative of liquid within said device.

18. The device of claim 17 wherein said inner and outer conductors define a cavity therebetween, said liquid sensor in fluid communication with said cavity.

19. The device of claim 17 further including a signal monitor electrically connected to said liquid sensor, said signal monitor configured to activate an alarm if said signal exceeds a signal threshold.

20. The device of claim 17 further including an electrical insulator watertight sealed to said inner and outer conductors.

21. The device of claim 17 wherein said signal source is an antenna.

22. The device of claim 17 wherein said signal source is another transmission line.

23. In combination:

a transmission line having attached thereto a first connector configured for connection to a second connector associated with a signal source; and

a fluid blocking device configured at one end for connection to said first connector and at an opposite end for connection to said second connector, said device comprising inner and outer conductors separated by an insulator watertight sealed to said inner and outer conductors, said device preventing transfer of liquid between said first and second connectors.

24. The combination of claim 23 wherein said signal source is an antenna.

25. The combination of claim 23 wherein said signal source is another transmission line.

26. The combination of claim 23 wherein said fluid blocking device further includes:

a first sealing member positioned between said insulator and said outer conductor creating said watertight seal therebetween; and

5 a second sealing member positioned between said insulator and said inner conductor creating said watertight seal therebetween.

27. The combination of claim 26 wherein said first and second sealing members are flexible sealing rings.

10 28. A device configured to be coupled between mating parts of a transmission line connector, the device comprising an arrangement of an inner conductor, an outer conductor and an intervening insulating structure, the arrangement configured to receive a liquid sensor.

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